



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,590	02/02/2001	Charilaos Christopoulos	040000-654	6242
27045	7590	11/29/2005	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR C11 PLANO, TX 75024			BELIVEAU, SCOTT E	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/773,590

Applicant(s)

CHRISTOPOULOS ET AL.

Examiner

Scott Beliveau

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-26 is/are pending in the application.
- 4a) Of the above claim(s) 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of the species corresponding to the usage of image cropping transcoding hints (claims 18 and 19) in the reply filed on 01 November 2005 is acknowledged. The traversal is on the ground(s) that the species defined by claims 19-25 are not patentably distinct because they are obvious variants over one another. Applicant's do not traverse the restriction of claim 26. Accordingly, the restriction requirement is withdrawn in part such that claims 19-25 are rejoined in light of applicant's admission that the claims are obvious variants of one another and claim 26 is still considered to be withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species. Claims 18-25 shall subsequently be treated on their merits.

Drawings

2. The drawings were received on 18 January 2005. These drawings are approved.

Response to Arguments

3. Applicant's arguments with respect to newly presented claims 18-25 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., transmission of transcoding hints along with multimedia information) are not recited in the rejected claim(s). Applicant's arguments appear to imply that the transcoding hints are

multiplexed or are a part of requested multimedia information. The claims however, only require that the method involves “receiving the multimedia information along with conversion hints”. For example, in the Tso et al. reference, the parser [22] receives both the multimedia information from the Internet [18] as well as “conversion hints” from the client [26] or other sources in order transcode the requested multimedia information properly. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Tso et al. (WO 98/43177).

In consideration of claim 18, the Tso et al. reference discloses a method for converting multimedia information. The method comprises a “client” [12] “requesting multimedia information from a converter” [20] (Page 4, Line 17 – Page 5, Line 7). The “converter” [20] “receives the multimedia information” either from a local cache or other remote source (Page

5, Lines 20-29; Page 6, Lines 23-29) along with “conversion hints” [26], “converts the multimedia information in accordance with the conversion hints” [24] (Page 11, Line 22 – Page 13, Line 19; Page 17, Lines 11-25). The “converter” [20] is a “transcoder” and the converter hints are transcoding hints” so as to select the appropriate transcoding per predetermined selection criteria (Page 5, Lines 1-7) and subsequently “provides the multimedia information to the requester” [12] (Page 5, Lines 9-29).

Claim 20 is rejected wherein the “conversion hints comprise video transcoding hints including a bandwidth range that represents a range in bandwidth that a video sequence can be transcoded to” (Page 6, Lines 5-7; Page 12, Line 26 – Page 13, Line 4).

6. Claims 18 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Vetro et al. (US Pat No. 6,542,546).

In consideration of claim 18, the Vetro et al. reference discloses a method for “converting multimedia information” (Col 5, Lines 31-40). The method comprises a client or user device [360] “requesting multimedia information from a converter” [340], the “converter” [340] “receives the multimedia information “ [301] along with “conversion hints” or “transcoding hints” in the form of MPEG-7 metadata and other information related to the semantic content of the bitstream as well and information specifying the network characteristics (Col 5, Line 45 – Col 6, Line 53). Accordingly, the “transcoder” or “converter” [340] “converts the multimedia information in accordance with the conversion hints” and “provides the multimedia information to the requestor” (Col 5, Lines 31-40).

Claim 21 is rejected wherein the “conversion hints comprise video transcoding hints including a computational complexity that indicates the amount of processing power that a conversion algorithm consumes” (Col 6, Lines 44-53).

7. Claim 18 is rejected under 35 U.S.C. 102(e) as being anticipated by Hind et al. (US Pat No. 6,715,129).

In consideration of claim 18, the Hind et al. reference discloses a method for “converting multimedia information” such as a requested web page. The method comprises a client [10] “requesting multimedia information from a converter” [46/47] (Col 5, Line 46 – Col 6, Line 51; Col 7, Lines 9-21). The “converter” [46/47] “receives the multimedia information along with conversion hints” (Col 4, Lines 34-38) wherein the “converter” [46/47] is “transcoder” and the converter hints are transcoding hints” (Figure 4; Col 7, Lines 22-27; Col 11, Lines 7-38). Subsequently, “converter” [46/47] “provides the multimedia information to the requestor” (Col 11, Lines 7-38)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent

Art Unit: 2614

any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tso et al. (WO 98/43177) in view of Nielsen et al. (US Pat No. 5,960,126).

In consideration of claim 19, the Tso et al. reference discloses that “conversion hints” may be associated with client characteristics associated with the display dimensions of the screen as well as content characteristics (Page 12, Lines 6-19) and further suggests the ability to scale images (Page 17, Line 27 – Page 18, Line 6). The reference, however, does not particularly disclose that the “conversion hints comprise image cropping transcoding hints selected from the group consisting of: information about a desired cropping location and shape”. In a related art pertaining to multimedia and computer graphics processing, the Nielsen et al. reference discloses that it is known in conjunction with image reduction to provide “information about a desired cropping location and shape” (Col 4, Lines 9-51) such that the image creator identifies information about a location (ex. coordinates) and information about a shape (ex. center of relevance of the image). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify Tso et al. so as to further include “conversion hints compris[ing] image cropping transcoding hints . . . consisting of information about a desired cropping location and shape”

11. Claims 19 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tso et al. (WO 98/43177) in view of applicant’s admission of fact.

In consideration of claims 19 and 21-25, the Tso et al. reference suggests that the particular usage of transcoding may relate to video compression and/or scaling (Page 6, Lines 5-7) and teaches that the particular “hints” are non-limiting to the client characteristics, transcoding server characteristics, content characteristics, network characteristics, proxy characteristics, user preferences, group preferences, content provider preferences, or other preferences (Page 12, Line 6 – Page 13, Line 19). The reference, however, does not particularly disclose that the particular “conversion hints” necessarily comprise those specifically related to “image cropping”, “computational complexity”, “quality range”, “motion vector predictors”, “frame rate reduction”, or “video mixing” as particularly claimed. As previously set forth, the reference discloses the particular species of “transcoding hint” directed towards a “bandwidth range”. As admitted in applicant’s response of 01 November 2005 and 31 May 2005, the claimed species are considered obvious variants relating to image and video transcoding hints. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize other obvious variants of “conversion hints” for the purpose added flexibility in transcoding requested media according to various criteria associated with the network, client, and user characteristics.

12. Claims 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tso et al. (WO 98/43177), in view of Nielsen et al. (US Pat No. 5,960,126), and in further view of applicant’s admission of fact.

In consideration of claims 21-25, the Tso et al. reference suggests that the particular usage of transcoding may relate to video compression and/or scaling (Page 6, Lines 5-7) and

teaches that the particular “hints” are non-limiting to the client characteristics, transcoding server characteristics, content characteristics, network characteristics, proxy characteristics, user preferences, group preferences, content provider preferences, or other preferences (Page 12, Line 6 – Page 13, Line 19). The reference, however, does not particularly disclose that the particular “conversion hints” necessarily comprise those specifically related to “computational complexity”, “quality range”, “motion vector predictors”, “frame rate reduction”, or “video mixing” as particularly claimed. As previously set forth, the combined references disclose the particular species of “transcoding hint” directed towards a “image cropping”. As admitted in applicant’s response of 01 November 2005 and 31 May 2005, the claimed species are considered obvious variants relating to image and video transcoding hints. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize other obvious variants of “conversion hints” for the purpose added flexibility in transcoding requested media according to various criteria associated with the network, client, and user characteristics.

13. Claims 19, 20, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vetro et al. (US Pat No. 6,542,546) in view of applicant’s admission of fact.

In consideration of claims 19, 20, and 22-25, the Vetro et al. reference discloses the particular usage of a number of factors in connection with making a decision as to the proper transcoding utilized. The reference, however, does not particularly disclose that the particular “conversion hints” necessarily comprise those specifically related to “image cropping”, “bandwidth range”, “quality range”, “motion vector predictors”, “frame rate reduction”, or “video mixing” as particularly claimed. As previously set forth, the reference

discloses the particular species of “transcoding hint” directed towards a “computational complexity”. As admitted in applicant’s response of 01 November 2005 and 31 May 2005, the claimed species are considered obvious variants relating to image and video transcoding hints. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize other obvious variants of “conversion hints” for the purpose added flexibility in transcoding requested media according to various criteria associated with the network, client, and user characteristics.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows. Applicant is reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made.

- The ISO documents provide evidence as to a validation experiment performed by the Multimedia description Schemes (MDS) Group in connection with media transcoding hints.
- The Kuhn (US Pub No. 2002/0157112 A1) reference discloses a method for the generation of transcoding hints. This reference does not currently qualify as prior art under 35 U.S.C. 102.
- The Li et al. (US Pat No. 6,345,279) reference discloses a system and method of adapting multimedia content to a client device through transcoding

Art Unit: 2614

- The Bjork et al. publication examines different models for the transcoding of multimedia information.
- The Smith et al. publication discloses techniques for adapting or transcoding multimedia content for universal access.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Beliveau whose telephone number is 571-272-7343. The examiner can normally be reached on Monday-Friday from 8:30 a.m. - 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

Art Unit: 2614

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott Beliveau
Examiner
Art Unit 2614

SEB
August 23, 2004



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600